Appl. No. 10/615,260 Docket No. 15499RRUS02U

Response mailed December 12, 2008 Reply to Final Office Action, mailed date September 12, 2008

IN THE CLAIMS

Please amend the claims as follows, substituting any amended claim(s) for the corresponding pending claim(s):

Claims 1-9. (Cancelled)

10. (Currently Amended) A method for transferring call control to a backup call server,
 comprising:

transmitting call setup signals between a calling party mobile station and a Base Station
 Controller (BSC);

5 transmitting call setup signals between the BSC and an originating Mobile Switching

6 Center (MSC) and between the between the originating MSC and a gateway-MSC (G-MSC) by

7 way of a first signaling gateway, and between the G-MSC and a Home Location Register (HLR),

 $8\,$ $\,$ wherein the call setup signals are transmitted between the G-MSC and the HLR by way of a

9 second signaling gateway, to determine a destination MSC;

10 transmitting destination MSC information from the HLR to the G-MSC by way of the
11 second signaling gateway;

when the destination MSC fails, routing call setup signals received from the G-MSC to a

backup MSC and establishing a call connection between the backup MSC and the originating

14 MSC:

17 and

when the G-MSC fails, routing the call setup signals received for the G-MSC to a backup
 G-MSC and establishing a call connection between the backup G-MSC and the originating MSC;

18 establishing a call connection between the calling party mobile station and a called party

19 mobile station using at least one of the backup G-MSC and the backup MSC.

- 1 11. (Previously Presented) The method of claim 10 wherein the step of routing the call setup
- 2 signals from the G-MSC to the backup MSC further comprises routing a first portion of the call
- 3 setup signals from the G-MSC to a first backup MSC and a second portion of the call setup
- 4 signals from the G-MSC to a second backup MSC, the backup MSC including the first backup
- 5 MSC and the second backup MSC.
- 1 12. (Previously Presented) The method of claim 10 wherein the step of routing the call setup
- 2 signals from the G-MSC to the backup MSC further comprises routing a first portion of the call
- 3 setup signals to a first backup G-MSC and a second portion of the call setup signals to a second
- 4 backup G-MSC, the backup G-MSC including the first backup G-MSC and the second backup
- 5 G-MSC.
 - 13. (Cancelled)
- 14. (Previously Presented) A cellular network, comprising:
- a Gateway Mobile Switching Station (G-MSC) for establishing call connections between
- 3 originating MSCs and destination MSCs;
- 4 a Home Location Register (HLR) for providing location information to the G-MSC as a
- 5 part of call setup;
- a first signaling gateway within a plurality of signaling gateways coupled between each
- 7 of a plurality of MSCs and the G-MSC;
- 8 a second signaling gateway within the plurality of signaling gateways coupled between
- 9 the G-MSC and the HLR;

wherein the HLR identifies a destination MSC for a call being setup based upon a called

- 11 party mobile station location record maintained in the HLR and transmits call signaling messages
- 12 to the second gateway;

10

- 13 wherein the second signaling gateway redirects the call signaling messages to a first
- 14 backup G-MSC upon detecting that the G-MSC is in an inactive state; and
- 15 wherein the first signaling gateway redirects the call signaling messages to a second
- 16 backup G-MSC upon detecting that the G-MSC is in an inactive state.

Response mailed December 12, 2008

Reply to Final Office Action, mailed date September 12, 2008

15. (Previously Presented) The cellular network of claim 14 wherein the second gateway
 coupled between the G-MSC and the HLR comprises one of a plurality of signaling gateways.

- 1 16. (Original) The cellular network of claim 14 further comprising at least one signaling
- 2 gateway coupled between the G-MSC and an originating MSC.
- 1 17. (Previously Presented) The cellular network of claim 14 further comprising at least one
- 2 signaling gateway coupled between the G-MSC and the destination MSC.
- 1 18. (Original) The cellular network of claim 17 wherein at least one of the first and second
- 2 backup G-MSC also operates as a primary G-MSC.
- 1 19. (Currently Amended) A signaling gateway for a cellular network coupled to
- 2 communicate with a destination switching element and to at least one home location register
- 3 (HLR), comprising:
- 4 a processor;
- 5 a memory for storing computer instructions that define the operational logic of the
- 6 signaling gateway, wherein the computer instructions include logic for:
- 7 receiving call signaling messages from the at least one HLR or an initiating
- 8 Mobile Switching Station (MSC);
- 9 determining whether the destination switching element is in an inactive state;
- 10 if the destination switching element is in an inactive state, determining a first
- 11 backup switching element; and a first-backup switching element;
- 12 transparently forwarding the call signaling messages to the first backup switching
- 13 element; and
- 14 <u>determining a second backup switching element and forwarding a first group of</u>
- 15 <u>call signaling messages to the first backup switching element and forwarding a second</u>
- 16 group of call signaling messages to the second backup switching element.
 - (Cancelled)